PHOTOGRAPHS OF TEMPORARY PARSHALL FLUME INSTALLATIONS FOR PHASE I RFI DATA COLLECTION IN OPERABLE UNIT NUMBERS 5 AND 6 AT THE ROCKY FLATS PLANT

April 1993

Prepared For:

U.S. Department of Energy,

Rocky Flats Office

Prepared By:

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Environmental Protection Department

Surface Water Division

U NU 610 7-12-93

1.

PURPOSE AND SCOPE

This document contains a collection of photographs of temporary Parshall flume installation locations in the Woman Creek and South Walnut Creek drainages at the Rocky Flats Plant (RFP). The flumes were installed in order to provide accurate stream-flow data for the Operable Unit Numbers 5 and 6 (OU5 and OU6 respectively) Phase I RCRA Facility Investigations. The photographs contained herein provide representations of wetland habitat at each OU5 and OU6 flume installation site prior to, and subsequent to each flume's installation. Photographs will be taken by EG&G Rocky Flats, Inc. when each of the flumes are removed from their installation locations to document the appearance of each site after removal of the flume. These photographs will demonstrate that no adverse impact to RFP wetlands will result from the flume installations.

The flumes were instrumented with a continuously recording flow meter and an automatic water sampler approximately two weeks after the flumes were photographed. This instrumentation is not shown herein. Each flume will remain in place for one year or until it is replaced by a permanent H-flume installation (EG&G, June 12, 1992); whichever comes first.

FLUME INSTALLATION LOCATIONS

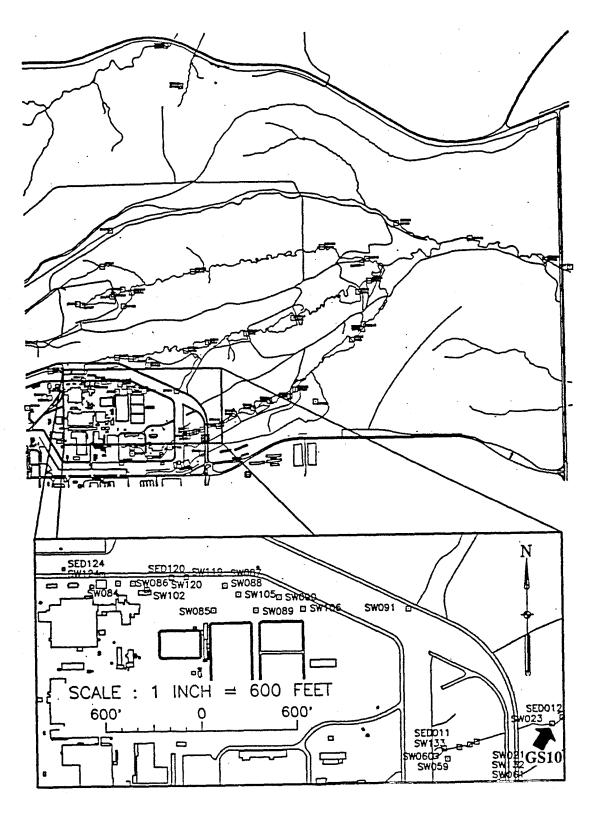
The approximate location for each flume installation is shown on Figures 1 and 2. These locations were selected jointly by the U.S. Department of Energy, EG&G, and the Colorado Department of Health (CDH). CDH provides technical evaluation and leadership for directing the scope of the OU5 and OU6 RFI activities.

All but one of the installations includes a nine-inch throat Parshall flume with wing walls built from plywood and 2" X 2" lumber. A tarp is used to seal the stream bed upstream from the flume in order to direct all of the stream flow into the flume. Sandbags are placed on top of the tarps to seal them against the stream bed and stabilize the wing walls. Station SW034 (Gaging Station GS16) on Antelope Springs Creek is equipped with a six-inch throat Parshall flume instead of the nine-inch size. Large snowmelt events in March and April 1993 have been observed to overtop the flumes. Therefore, their capacity is limited to measuring baseflow and most low-intensity storm runoff flows.

PHOTOGRAPHY

The 8" X 10" photographs contained herein were taken by Mr. Kim Ortiz of EG&G Photography Department. Polaroid photographs were taken by Mr. Michael Freehling of the Environmental Protection Management Department, Surface Water Division. The Polaroids were taken in order to expedite installation of the flumes to comply with the OU5 field sampling schedule.

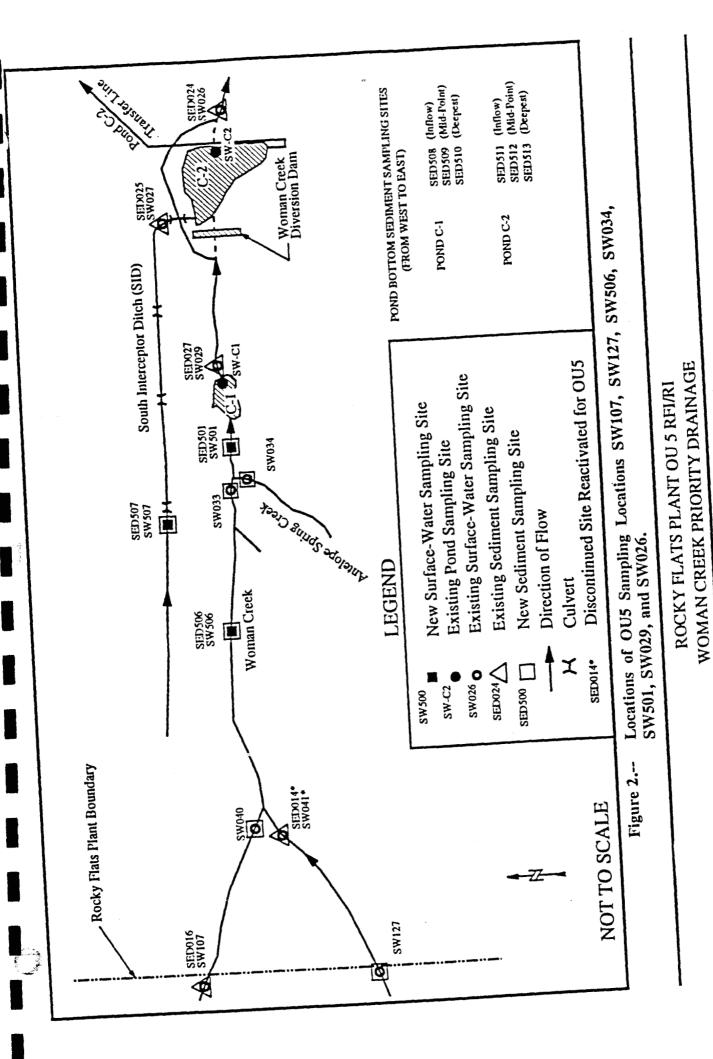
NORTHEAST QUADRANT

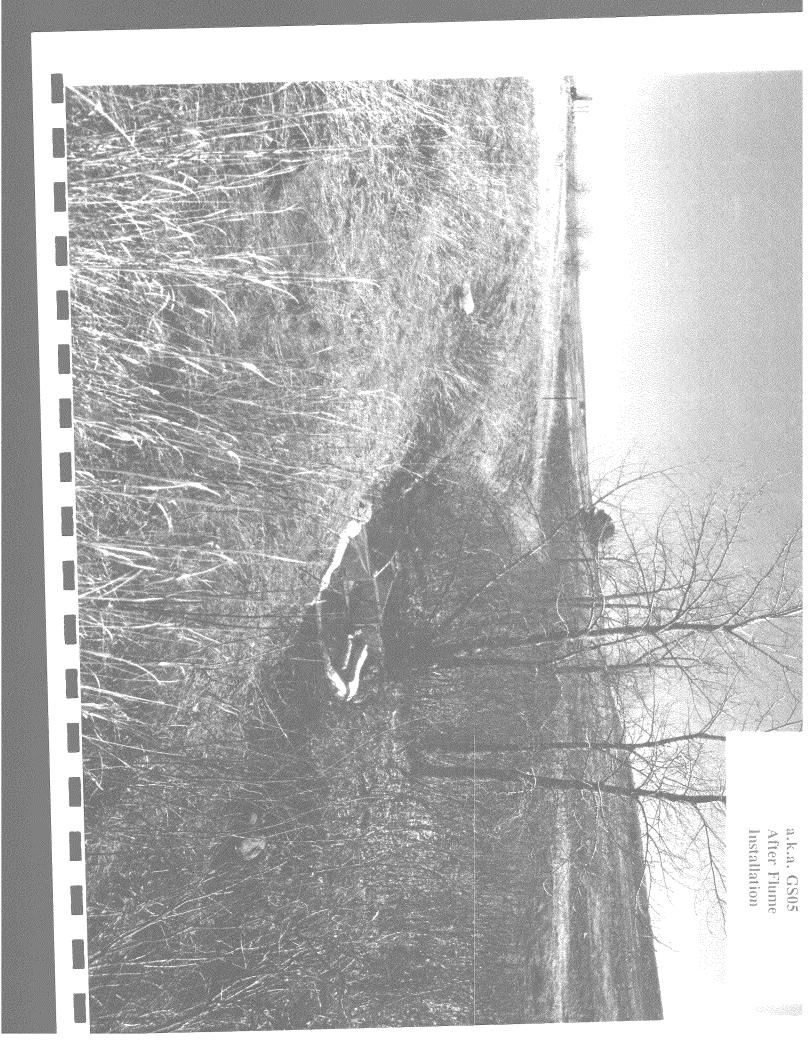


2/19/92

Date:

	Figure 1Location of Gaging Station
Prepared by :RLB	GS10.

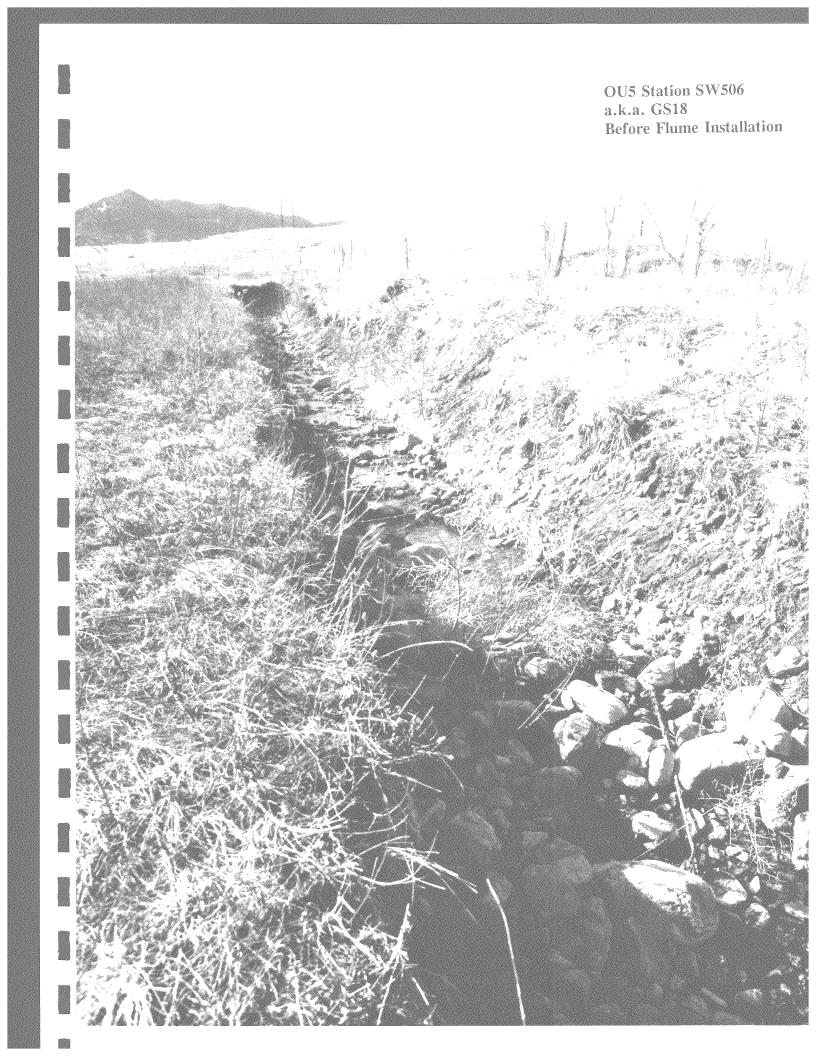


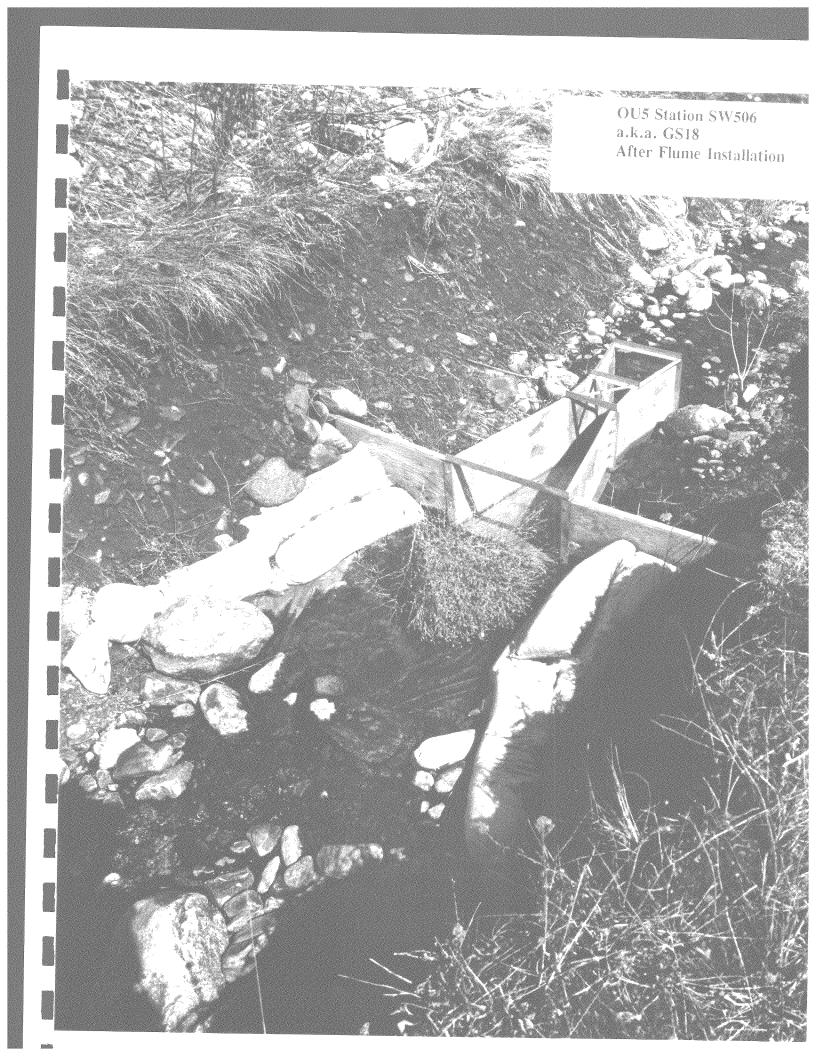






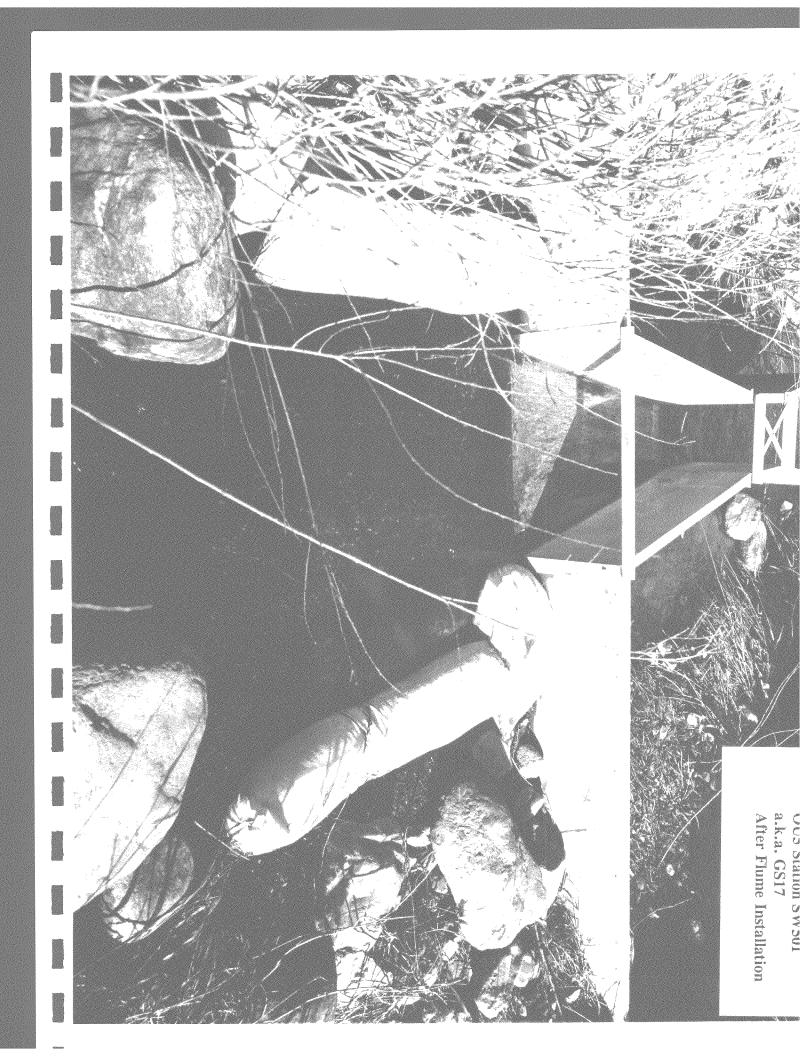
OUS Station SW127









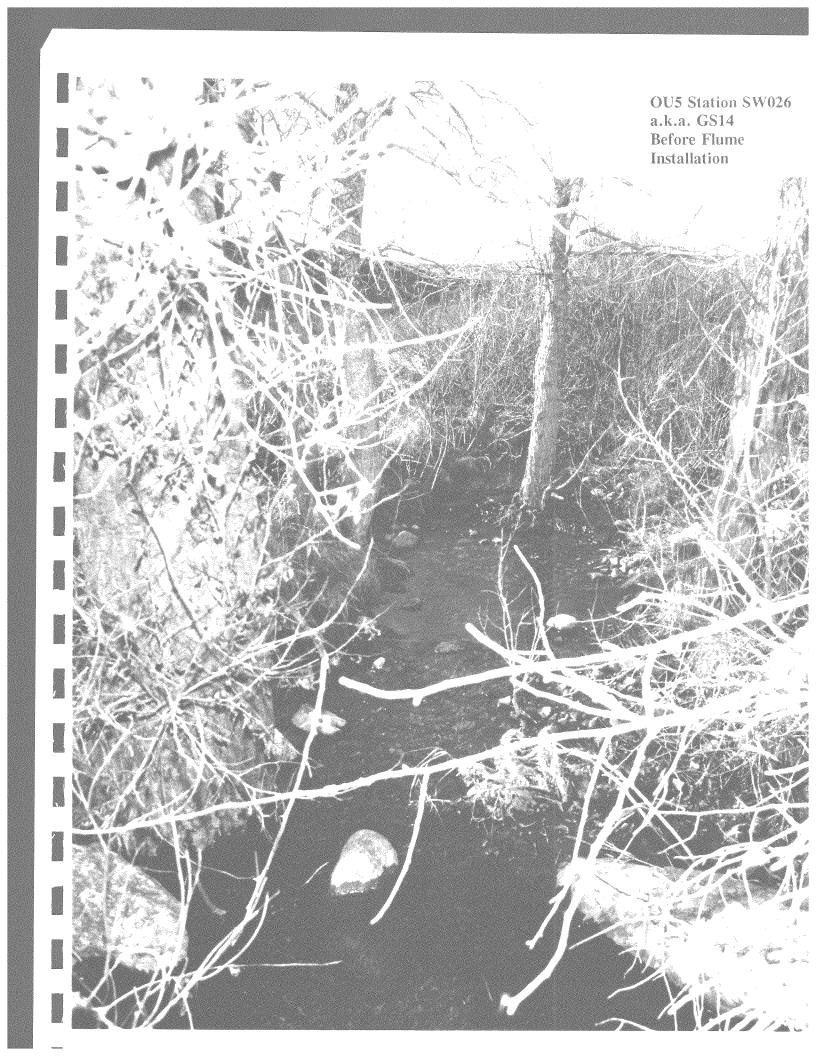


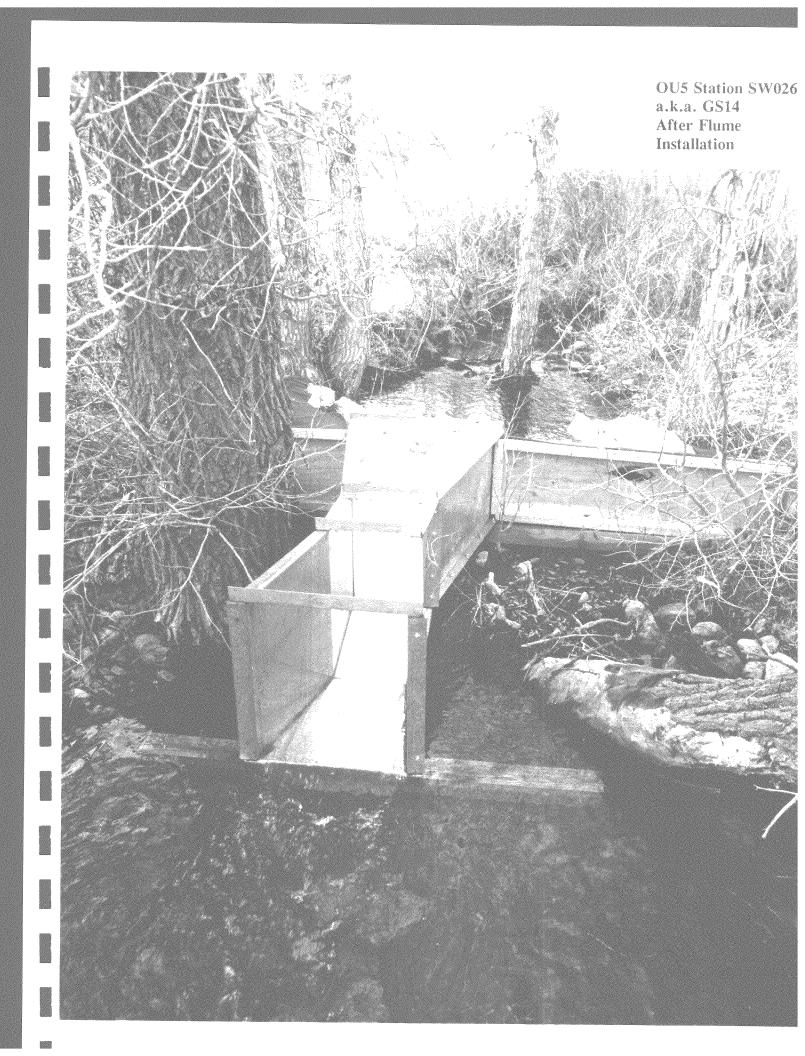


a.k.a. GS07

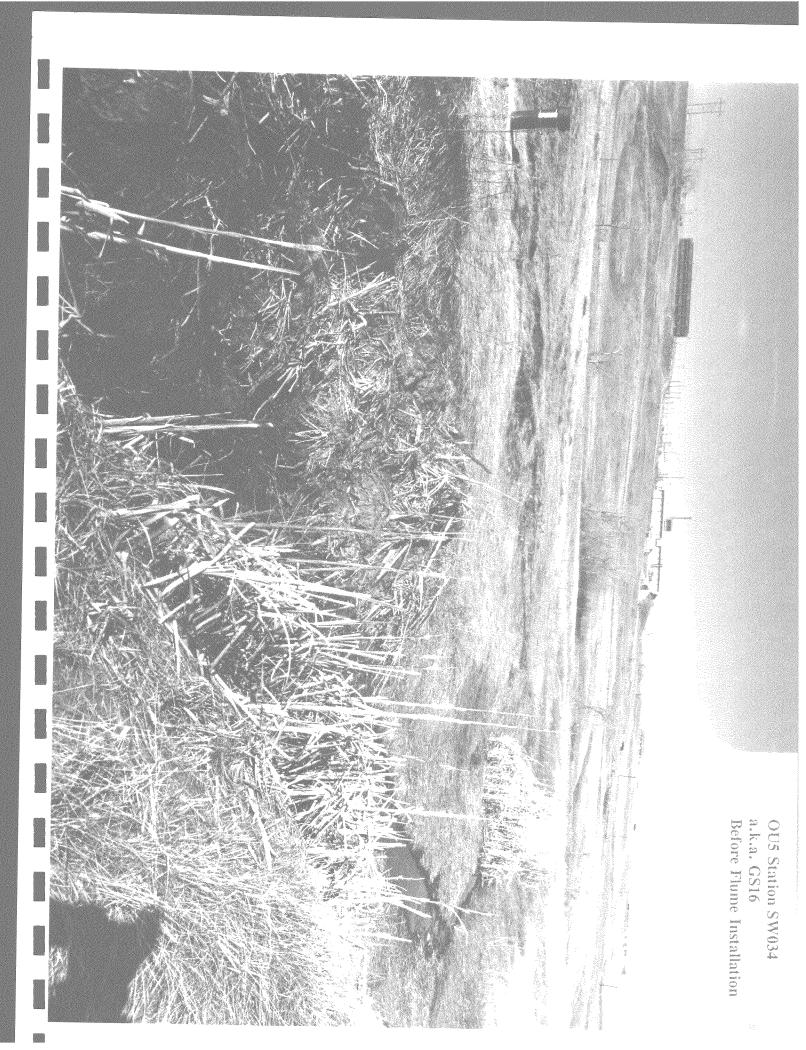
After Flume Install

















OUS Station SW034



